ISSUE DATE: February 17, 1999

DOCKET NO. E-002/RP-98-32

ORDER MODIFYING RESOURCE PLAN, REQUIRING ADDITIONAL WIND GENERATION, REQUIRING FURTHER FILINGS, AND SETTING STANDARDS FOR NEXT RESOURCE PLAN FILING

#### BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

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Commissioner

In the Matter of the Application of Northern States Power Company for Approval of its 1998 Resource Plan

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#### **PROCEDURAL HISTORY**

On January 6, 1998 Northern States Power Company (NSP) filed its fourth biennial resource plan under Minn. Stat. § 216B.2422 and Minn. Rules, chapter 7843.

The following parties filed comments on the plan: the Department of Public Service, the Residential and Small Business Utilities Division of the Office of the Attorney General, the Izaak Walton League of America, Minnesotans for an Energy-Efficient Economy, Sustainable Energy for Economic Development, Communities United for Responsible Energy, the North American Water Office, the Prairie Island Coalition, the Union of Concerned Scientists, and the Crazy Horse Defense Project.

On July 6, 1998 the Izaak Walton League filed a motion asking the Commission to conduct public hearings on the plan, suggesting three sites: St. Paul, Pipestone, and Moorhead. The Commission granted the motion and asked the Executive Secretary to arrange hearings by video conference. Hearings were held on the following dates at the sites listed: December 1 — St. Paul and Mankato; December 2 — St. Paul, Moorhead, St. Cloud, and Winona; December 14 — Pipestone. All hearings were moderated by an Administrative Law Judge and attended by members of the Commission.

After hearings were ordered several citizens' groups and members of the public submitted written comments, which were entered into the public hearing record.

On January 14, 1999 all parties presented oral argument. On January 21, 1999 the Commission took further oral comment and deliberated on the matter.

#### FINDINGS AND CONCLUSIONS

# I. Resource Planning in General

The resource planning statute and rules are detailed, but they basically require utilities to file biennial reports on (1) the projected energy needs of their service areas over the next 15 years; (2) their plans for meeting projected need; (3) the analytical process they used to develop their plans for meeting projected need; and (4) their reasons for adopting the specific resource mix proposed to meet projected need. Minn. Stat. § 216B.2422 and Minn. Rules Chapter 7843.

These requirements are designed to strengthen utilities' long term planning processes by providing input from the public, other regulatory agencies, and the Commission. They are also designed to ensure that utilities give adequate consideration to factors whose public policy importance has grown in recent years, such as the environmental and socioeconomic impact of different resource mixes. (For example, the statute requires utilities to develop plans for meeting 50% and 75% of new and refurbished capacity needs with conservation and renewable energy; it also requires them to factor into resource decisions the environmental costs of different generation technologies.)

Although the Commission must approve, reject, or modify the resource plans of investor-owned utilities, the resource planning process is largely collaborative and iterative.

It is collaborative because there are few hard facts dictating resource choices or deployment timetables. The facts on which resource decisions depend -- how quickly an area and its need for electricity will grow, how much electricity will cost over the lifetime of a generating facility or a purchased power contract, how much conservation potential the service area holds and at what cost -- all require the kind of careful judgment which sharpens with exposure to the views of engaged and knowledgeable stakeholders.

It is iterative because analyzing future energy needs and preparing to meet them is not a static process; strategies for meeting future needs are always evolving in response to changes in actual conditions in the service area. When demographics, economics, or technologies change, so do resource needs and strategies for meeting them. While a concrete document is necessary to focus discussion, parties' positions evolve over the course of each resource plan proceeding, and from one proceeding to the next. Commission decisions, too, may well be refined by decisions in subsequent proceedings.

# II. The Legal Standard

The statute directs the Commission to "approve, reject, or modify the plan of a public utility, as defined in section 216B.02, subdivision 4, consistent with the public interest." Minn. Stat. § 216B.2422, subd. 2.

The rules require the Commission to consider at least the following factors in evaluating resource plans:

Resource options and resource plans must be evaluated on their ability to:

A. maintain or improve the adequacy and reliability of utility

service;

B. keep the customers' bills and the utility's rates as low as practicable, given regulatory and other constraints;

C. minimize adverse socioeconomic effects and adverse effects upon the environment;

D. enhance the utility's ability to respond to changes in the financial, social, and technological factors affecting its operations; and

E. limit the risk of adverse effects on the utility and its customers from financial, social, and technological factors that the utility cannot control.

Minn. Rules, part 7843.0500, subp. 3.

# III. The Company and its Resource Plan

# A. The Company

NSP is Minnesota's largest electric utility, serving approximately one million Minnesota customers, mainly in the Twin Cities and St. Cloud areas. The Company also serves customers in Wisconsin, North Dakota, South Dakota, and Michigan, but Minnesota accounts for 76% of its revenues from electric operations.

The Company presently owns some 7,000 megawatts of generating capacity and purchases an additional 1,500 megawatts from other utilities and independent power producers. It is in the process of contracting for 425 megawatts of wind generation and 125 megawatts of biomass generation, both scheduled to come on line by 2003.

The Company is the state's only nuclear utility, operating nuclear power plants at Monticello and near Red Wing, on grounds adjacent to the Prairie Island Mdewakanton Sioux Indian Community Reservation

#### B. The Resource Plan

The Company's resource plan covers the period from 1998 through 2012. During this time the Company forecasts that demand for electricity will increase by 1.7% per year, creating a need for an additional 1,207 to 3,031 megawatts of capacity by 2012. A portion of this demand will be met through conservation and mandated renewable generation already under contract; the remainder will be met by acquiring some 2,400 megawatts of new generation.

The Company plans to secure new generation mainly through competitive bidding. It has used competitive bidding for new generation since 1994, with overall success. It retains the option of negotiating directly with vendors, outside the bidding process, when rapid action is necessary to exploit extraordinary opportunities or prevent supply shortages.

#### IV. Issues Before the Commission

By necessity, the NSP resource plan is long and complex, explaining in detail the factual assumptions, analytical tools, and business and policy rationales behind the hundreds of decisions which make up the plan. Most of these decisions are routine, but some are contested, and a few raise important public policy issues.

Those decisions involving major controversy or significant public policy issues will be treated individually below. They fall mainly into the following categories: whether NSP should be ordered to buy wind generation beyond the minimum required by the Legislature; whether the Company's plan to stretch the amount of nuclear waste storage space at Prairie Island by using temporary storage racks violates existing legislative and Commission directives; whether the Company's conservation goals are reasonable; and whether the Company's approach to considering environmental costs squares with sound public policy.

The Commission will also take up the general adequacy of the Company's planning process, the role of transmission issues in future resource plans, socioeconomic and environmental issues which might bear further development, and when the Company should file its next resource plan.

# V. Additional Wind Generation Required

#### A. The Issue

One of the conditions imposed by the Legislature when it gave NSP permission to store nuclear waste from the Prairie Island plant in dry casks on site was that the Company make significant investments in renewable energy. The Company was required to add 425 megawatts of windgenerated energy and 125 megawatts of biomass-generated energy by specified dates. The Company was also required to add another 400 megawatts of wind energy if the Commission so ordered, subject to resource planning and least cost planning requirements. Minn. Stat. § 216B.2423.

The parties disagreed over whether the Commission should order the Company to secure the additional 400 megawatts of wind energy.

#### B. The Legal Standard

The statutory language on the additional 400 megawatts of wind energy reads as follows:

The public utilities commission shall order a public utility subject to subdivision 1, to construct and operate, purchase, or contract to purchase an additional 400 megawatts of electric energy installed capacity generated by wind energy conversion systems by December 31, 2002, subject to resource planning and least cost planning requirements in section 216B.2422.

Minn. Stat. § 216B.2423, subd. 2.

# C. Positions of the Parties

# 1. The Company

NSP opposed adding another 400 megawatts of wind generation, at least in the near term. Under any set of assumptions the Company thought reasonable, its cost models showed the cost of wind exceeding the cost of natural gas by 32 to 81 million dollars over the life of the contract. The Company also argued that this would be a particularly inopportune time to add more wind — in its view the technology is still developing and over-priced, and the Company has not yet had enough experience with its first 425-megawatt wind purchase to profit from it.

NSP read the statute's December 31, 2002 deadline as the deadline for installing the additional 400 megawatts of wind energy, should the Commission require it, and its cost models were based on this assumption.

# 2. The Department of Public Service

The Department of Public Service (the Department) challenged several of the assumptions in the Company's cost models. The Department said, for example, that the natural gas prices assumed by the Company over the life of the comparison contract were unrealistically low, lower in fact than any projection offered by any other credible source. The Department also pointed out that the Company cost models were projecting a higher price than the actual price the Company paid for the first 425 megawatts. Since that actual price was set by competitive bidding in what is thought to be a declining cost/declining price environment, that result is counter-intuitive.

The Department's cost models showed that an additional 400 megawatts of wind generation installed by January 1, 2003 would be marginally cost-effective. Due to the large number of uncertainties involved, however, the Department recommended requiring NSP to conduct a bidding process for the 400 megawatts at issue and to make price the determining factor. The agency recommended an all-source bidding process, but cautioned that it might be impossible to construct a fair one, in which case a separate all-wind process should be required.

The Department, too, at least initially read the statute's December 31, 2002 deadline as the deadline for installing the additional 400 megawatts of wind energy, should the Commission require it, and its cost models were based on that assumption.

# 3. The Residential Utilities Division of the Office of the Attorney General

The Residential Utilities Division of the Office of the Attorney General (RUD-OAG) argued that the price of wind generation was actually much more competitive than Company studies showed, because those studies overestimated wind costs and underestimated natural gas costs across the board.

The agency pointed out that even under Company projections, adding the optional 400 megawatts of wind energy would increase the Company's revenue requirement by only two-tenths of one percent to one percent, without factoring in environmental costs. The agency noted that, should federal environmental policies evolve in the direction of a carbon tax or similar initiatives, wind generation could become a real bargain.

The RUD-OAG read the statute's December 31, 2002 deadline as the deadline for the Company to

<u>contract</u> for the additional 400 megawatts of wind energy, should the Commission require it. The agency therefore believed there was time for more factual development and urged the Commission to defer action until the parties had analyzed the material presented in reply comments and explored the potential for developing a "benchmark" price, a price at which all parties could agree that wind is the least-cost resource.

#### 4. The Non-Government Intervenors

The Izaak Walton League (IWL), the Union of Concerned Scientists, the Sustainable Energy for Economic Development Project (SEED), and Minnesotans for an Energy-Efficient Economy all filed comments urging the Commission to require the additional 400 megawatts of wind energy. The IWL submitted cost models showing wind energy becoming less expensive than natural gasfired energy in 2008, instead of 2015, as shown in Company modeling. The Union of Concerned Scientists supported the IWL study and submitted one of its own showing that Minnesota could generate up to 5,000 megawatts of wind energy for under 4.2 cents per kilowatt hour, even if the federal tax credit for wind energy development is not renewed.

SEED emphasized the socioeconomic benefits of wind development on Minnesota's rural communities, citing the statutory mandate to consider socioeconomic costs in resource planning. Minn. Stat. § 216B.2422, subd. 3.

Minnesotans for an Energy-Efficient Economy stressed that the Legislature has adopted a clear public policy favoring renewable energy over nonrenewable energy and claimed that NSP's resource plan in general, and its opposition to the additional 400 megawatts of wind in particular, are at odds with that clearly articulated public policy.

#### D. Public Hearing Comments

The optional wind mandate was one of the issues on which the Commission sought comment at the public hearings, and public witnesses did offer fresh perspectives on the issue.

Opinion was not unanimous, but of the opinions expressed, a clear majority favored requiring the additional 400 megawatts of wind.

Renewable energy clearly has gained a loyal following among at least some parts of the ratepaying public. One witness testified that one municipal utility, Moorhead Public Service, has had to establish a waiting list to participate in its wind-power program. The program permits customers to sign three-year contracts for wind-generated power at a price premium of one-half cent per kilowatt hour. Some 435 customers signed contracts, and over 100 customers asked to be placed on the waiting list.

Another witness testified that a study by Action Marketing Research shows that 95% of the public supports renewable energy at standard rates, 84% support it at a 1% price premium, and a majority continue to support it at a 10% price premium.

#### E. Commission Action

# 1. Summary of Commission Action

The Commission reads the statute's December 31, 2002 deadline as the deadline for Commission action, not Company action. The Commission finds that requiring NSP to acquire the optional 400 megawatts of wind generation is in the public interest and will require that it be installed before the end of the planning period. The Commission will require the wind generation to be selected in competition with other resources, to ensure the best possible price and to encourage the development of a healthy wind energy market.

These decisions are explained below.

#### 2. Statutory Deadline is Deadline for Commission Action

A threshold issue in considering whether or not to require the Company to develop the optional 400 megawatts of wind generation is how soon that generation would have to be on line. The statute is unclear as to whether December 31, 2002 is the deadline for installing the capacity, having the capacity under contract, or ordering the Company to acquire the capacity:

The public utilities commission shall order a public utility subject to subdivision 1, to construct and operate, purchase, or contract to purchase an additional 400 megawatts of electric energy installed capacity generated by wind energy conversion systems by December 31, 2002, subject to resource planning and least cost planning requirements in section 216B.2422.

Minn. Stat. § 216B.2423, subd. 2.

The question is important mainly because all studies in the record indicate that wind generation will become more competitive over time, but also because placing the Company under a known, tight deadline could reduce its bargaining power and raise the price for the additional wind generation. Price is clearly an important factor in the public interest equation the Commission is being asked to solve. Since timing could affect price, thereby affecting the public interest analysis, the Commission must first determine the meaning of the statutory deadline.

The parties have suggested two interpretations — that the deadline applies to having the capacity on line and that the deadline applies to having the capacity under contract. The Commission, however, believes the most logical interpretation is that the deadline applies to the Commission's Order requiring or not requiring the capacity.

The problem with reading the deadline as applying to having the capacity on line or having the capacity under contract is that this appears to create two different deadlines, depending upon whether the Company builds its own facilities or buys from a vendor. If the Company chooses to "construct and operate" its own facilities, it must do so by December 31, 2002; if it chooses to buy wind power from another vendor, it must "contract to purchase" the power by that date. In the second case, actual operation could be another two or more years away, since wind developers often do not begin construction until a contract is signed.

There is no apparent policy justification for this timing difference, and in fact it appears to make little sense. If the Legislature had meant the deadline to apply to having the wind power securely in the Company's resource portfolio, it would have set the same deadline for *construction* (and not operation) of wind facilities as for contracting to purchase wind energy. The fact that it did not do so suggests that the Legislature was focusing on a *decision* deadline, not a construction, operation, or contract deadline.

The Commission concludes that a better reading is to find that the Commission is to order (or not order) the additional wind generation by December 31, 2002, leaving the timing of the acquisition to the Commission and the resource planning process. This would be consistent with the discretionary nature of the final 400 megawatts, with legislative intent to move the wind energy issue front and center on the regulatory agenda, and with longstanding legislative efforts to make the resource planning process an effective vehicle for analyzing and resolving major, company-specific energy policy issues.

# 3. The Public Interest Requires the Addition of the Optional 400 Megawatts of Wind Energy

The statute requires the Commission to order the additional wind generation "subject to resource planning and least cost planning requirements in section 216B.2422." Minn. Stat. § 216B.2423, subd. 2. The Commission reads this language to mean that it should order the additional wind generation unless such an Order would be inconsistent with the resource planning and least cost planning requirements of section 216B.2422.

The resource planning and least cost planning requirements of section 216B.2422 require a public interest approach to resource selection. The Commission is to approve, reject, or modify a proposed resource plan "consistent with the public interest." Section 216B.2422, subd. 4 also includes an explicit preference for renewable energy over nonrenewable energy:

**Preference for renewable energy facility.** The commission shall not approve a new or refurbished nonrenewable energy facility in an integrated resource plan or a certificate of need, pursuant to section 216B.243, nor shall the commission allow rate recovery pursuant to section 216B.16 for such a nonrenewable energy facility, unless the utility has demonstrated that a renewable energy facility is not in the public interest.

Minn. Stat. § 216B.2422, subd. 4.

Besides stating an explicit preference for renewable energy, the statute requires utilities to include in their resource plans least cost plans for meeting 50% and 75% of new and refurbished capacity needs with conservation and renewable energy resources. Minn. Stat. § 216B.2422, subd. 2. It also requires utilities to consider environmental and socioeconomic costs in selecting new resources, a requirement which reinforces and provides insight into the origins of the preference for renewable energy. Minn. Stat. § 216B.2422, subds. 3 and 5.

The Commission must integrate the two statutes, one limiting new generation to renewable fuel sources unless the utility demonstrates that that is not in the public interest, the other directing the Commission to order 400 megawatts of wind generation, subject to the requirements of the

first statute. The Commission begins then, with the presumption that the 400 megawatts of wind energy is in the public interest and examines the record to determine whether this presumption has been disproved. The Commission concludes that it has not.

The only reason given by any party for finding the additional wind generation not in the public interest is that it will allegedly cost more than natural gas generation, currently the lowest priced competitor. The Commission finds that this cost differential, if it exists, is not large enough to overcome the strong public policies favoring the development of this wind resource.

First of all, the Company's cost projections were all based on the assumption that the new wind energy had to be installed by December 31, 2002. There is nearly unanimous agreement that wind prices will be lower later in the planning period. The Commission's reading of the statute - that it need only *order* installation of the wind generation by December 31, 2002 -- gives the Company the flexibility it needs to acquire the new energy at the best price.

Second, as a number of parties noted, most Company projections were based on worst case scenarios for wind and best case scenarios for natural gas. While those scenarios could coincide, it is more likely that wind prices will be lower, and gas prices higher, than the Company projects. Both the Department and the RUD-OAG were cautiously optimistic that total wind prices over the course of a long term contract would be lower than natural gas prices, and the Izaak Walton League produced a study showing that wind would be more economical, even over the time frame assumed by the Company.

Furthermore, the cost figures submitted and debated by the parties did not include environmental or socioeconomic costs. Since a major purpose of the resource planning statute is to highlight these costs as serious public policy concerns, the Commission is deeply uncomfortable with ignoring them.

Finally, the amount of the cost differential -- even under Company projections, only two-tenths of one percent to one percent of annual costs -- is too small to outweigh the strong statutory preference for renewable energy and the clear statutory directive to order additional wind generation unless it fails the resource planning statute's public interest test.

For all these reasons, the Commission will order NSP to add 400 megawatts of wind generation during this planning period, which ends in 2012.

# 4. The Public Interest Requires the Company to Secure the Wind Energy in Competition with Other Resources Through Competitive Bidding

Another point of contention between the parties was how the Company should secure the additional 400 megawatts of wind energy, should the Commission order it, and, more generally, how to ensure that wind and other renewable resources would be treated fairly in the Company's competitive bidding process.

These are difficult issues. The differences between wind and fossil fuels make constructing an unbiased all-source bidding process extremely complicated. For example, wind generation contracts usually set one price for the entire contract term; natural gas generation contracts usually set an initial price and permit subsequent prices to vary with the price of natural gas. This makes precise price comparisons impossible.

Similarly, most wind energy contracts must be long term for developers to obtain financing; natural gas contracts can be for shorter terms. Long term and short term contracts cannot be compared head to head. Wind energy also poses the question of how to compare an intermittent resource, and the integration costs it imposes on the system, with a resource that is always available. The number and nature of ancillary services required for wind and natural gas generation may also differ.

Finally, although the Commission, under legislative direction, has assigned monetary values to the environmental externalities associated with different methods of generating electricity, factoring those values into competitive bidding is not a mechanical process.<sup>1</sup> Establishing equitable environmental costs on a contract-by-contract basis remains a challenging task.

In short, there are serious obstacles to constructing a competitive bidding process that can fairly evaluate both wind and fossil fuel projects. This has led some parties to support a wind-only bidding process. The Commission is convinced, however, that an all-source bidding process, both for the 400 megawatts of wind energy required in this Order and for future wind generation, is far superior and justifies the significant time and effort its development will require.

First, it is critical that the additional 400 megawatts of wind energy required in this Order be obtained at the best possible price, and permitting wind developers to bid only against one another in a single bidding cycle is unlikely to produce that price. Requiring wind bids to compete against bids from traditionally low-priced suppliers, with no guarantee that wind will prevail in any particular bidding cycle, is more likely to yield the lowest wind price, to the benefit of Minnesota households, institutions, and businesses.

Equally important, establishing and institutionalizing a separate track for evaluating and buying wind resources is unlikely to benefit wind development in the long run. If wind energy is to become a mainstay of NSP's or any other utility's resource portfolio, it must eventually become just another resource, competing on its own merits against other forms of generation. A wind-only bidding process is unlikely to further that goal.

One of the greatest challenges in nurturing the development of renewable energy, or any emerging technology, is how to encourage its use without hobbling its ability to move beyond regulatory dependence into the mainstream. The Commission believes that requiring the additional 400 megawatts of wind generation, while requiring that it be secured in competition with other resources, will further this process.

The Commission will direct the parties to work together to develop an all-source bidding process that will treat wind generation and other forms of renewable energy fairly. The parties have already given this issue much thought, and the record in this case provides a solid foundation for further analysis and discussion. The Commission will review the parties' work and determine how to proceed when their discussions have ended.

# VI. Revised Full Core Off-load Plan Does Not Violate Legislative or Commission

<sup>&</sup>lt;sup>1</sup> Minn. Stat. § 216B.2422, subd. 3.

#### Directives and Postpones the Need for Bids to Replace Prairie Island Generation

#### A. The Issue

NSP holds a limited certificate of need, granted by the Commission and expressly ratified by the Legislature, to store spent nuclear fuel in up to 17 dry casks on the grounds of the Prairie Island nuclear power plant.<sup>2</sup> One of the conditions imposed in that certificate of need was that the Company make and retain space in the plant's spent fuel storage pool for all of the fuel in the plant's two nuclear reactors:

The Commission accepts the Company's representation that it is prudent to reserve pool storage space for a full core off-load and will require the Company to reserve adequate pool space for that purpose when it becomes available. (Currently, there is not enough empty pool space for a full core off-load of both reactors.)

#### ORDER GRANTING LIMITED CERTIFICATE OF NEED at 33.

In its resource plan the Company stated that it planned to meet the full core off-load requirement by creating temporary storage spaces in the cask operations portion of the storage pool instead of in the pool proper. This plan met all safety and operational requirements of the federal Nuclear Regulatory Commission and, together with a change in the rate at which the reactors consumed nuclear fuel, would extend the operational life of the plant from the end of 2001, as the certificate of need Order assumed, to 2007.

Because of this change in the plant's life expectancy, the Company had not complied with the portion of the Commission's 1995 resource plan Order requiring it to develop immediately, in consultation with interested parties, a contingency plan and a Request for Proposals to replace the capacity of the Prairie Island plant.<sup>3</sup>

The parties disagreed over whether the Company's full core off-load plan complied with legislative and Commission directives and whether the Company should have continued developing the contingency plan and Request for Proposals.

#### **B.** Positions of the Parties

<sup>&</sup>lt;sup>2</sup> <u>In the Matter of an Application for a Certificate of Need for Construction of an Independent Spent Fuel Storage Installation,</u> Docket No. E-002/CN-91-19, ORDER GRANTING LIMITED CERTIFICATE OF NEED (August 10, 1992); Minn. Stat. § 116C.77.

<sup>&</sup>lt;sup>3</sup> In the Matter of a Request by Northern States Power Company for Approval of its 1995 Resource Plan, Docket No. E-002/RP-95-589, ORDER APPROVING NSP'S 1995 RESOURCE PLAN AS MODIFIED, REQUIRING CONSULTATION WITH INTERESTED PARTIES AND COMPLIANCE FILING, AND SETTING REQUIREMENTS FOR NEXT RESOURCE PLAN FILING (April 29, 1997).

# 1. The Department of Public Service

The Department of Public Service believed that the Company's plan was in compliance with all legislative and Commission directives and met public interest standards of prudence and safety. The Department considered the Company's decision to postpone developing a bidding process for replacement of Prairie Island's generation reasonable.

# 2. Communities United for Responsible Energy

Communities United for Responsible Energy (C.U.R.E.) urged the Commission to prohibit NSP from using cask operations space to meet the full core off-load requirement of the limited certificate of need. C.U.R.E. pointed out that, while NSP's plan would not violate the 17-cask limit established in the certificate of need, it would permit the Prairie Island plant to operate longer and generate more nuclear waste than the Commission and the Legislature had anticipated. C.U.R.E. contended that a 2001 shutdown date and the use of the storage pool proper for full core off-load were integral conditions of the certificate of need and should be enforced

#### 3. Prairie Island Coalition

The Prairie Island Coalition, like C.U.R.E., argued that NSP's plan violated the intent of the certificate of need and of the legislative negotiations which resulted in its ratification. That intent, in the Coalition's view, was to grant NSP the right to use dry cask storage only long enough to ensure an orderly transition from nuclear energy to more environmentally benign resources.

The Coalition expressed grave safety concerns as to the Prairie Island reactors, the storage casks, the Company's full core off-load plans, and nuclear energy in general. These concerns, the Coalition argued, should lead the Commission to order NSP to revise its full core off-load contingency plan and require the Company to store off-loaded fuel in the storage pool proper.

The Coalition also contended that central-station generating facilities were no longer necessary or practical, and that the Commission must encourage smaller generating facilities within the localities they are intended to serve. Extending the life of the Prairie Island plant would only extend the delay in making this crucial transition.

#### C. Commission Action

The Commission finds that the Company's plan to meet its full core off-load requirement by creating temporary storage spaces in the cask operations section of the storage pool does not violate any Commission or legislative directive.

First, the Order granting the certificate of need does not specify any particular method of achieving full core off-load. In fact, it defers to the Company's expertise in deciding to require it:

The Commission accepts the Company's representation that it is prudent to

reserve pool storage space for a full core off-load and will require the Company to reserve adequate pool space for that purpose when it becomes available. (Currently, there is not enough empty pool space for a full core off-load of both reactors.)

#### ORDER GRANTING LIMITED CERTIFICATE OF NEED at 33.

Second, had the Commission or the Legislature meant to require NSP to shut down Prairie Island at the end of 2001, they would have said so, either directly or by placing explicit conditions on the certificate which would have accomplished that goal. For example, they could have required a particular method of achieving full core off-load, limiting the amount of storage space available. They could have specified the rate at which the reactors could consume nuclear fuel, another factor affecting how long the plant could operate with 17 casks. Instead, they simply set a limit on the total number of casks.

While the Order granting the limited certificate of need does contain assumptions about how long the plant could continue to operate with 17 storage casks, those assumptions were not made into conditions on the certificate. Rather, they were considerations taken into account in deciding upon a 17-cask limit.

The Commission was less focused on establishing a specific date for shut-down than on avoiding the two extremes of open-ended dry cask storage and immediate shut-down. The Commission granted more casks than any party (other than the Company) recommended, balancing the need to continue reaping the benefits of Prairie Island's economical output with the need to develop alternatives to nuclear energy.

Finally, the safety concerns raised by the Prairie Island Coalition are more properly directed to the federal Nuclear Regulatory Commission, the agency charged with technical regulation of the nation's nuclear power operations and ensuring their safety.<sup>4</sup>

For all these reasons, the Commission concludes that the Company's full core off-load procedures do not violate any Commission or legislative directive.

The Commission also agrees with the Company and the Department that it was reasonable, in light of the plant's extended life expectancy, to delay making concrete plans to replace its output, and especially to delay issuing a Request for Proposals. Any Request for Proposals issued now could encourage speculative bids and miss resources that might be available when actually needed. The Commission agrees with the Company and the Department that issuing a Request

<sup>&</sup>lt;sup>4</sup> The Commission understands that NSP and the Coalition are addressing these issues before the Nuclear Regulatory Commission. The Nuclear Regulatory Commission is certainly an appropriate and effective forum for these concerns, and the Commission will require the Company to file complete explanations of any Nuclear Regulatory Commission proceedings which could affect the Company's waste management operations.

for Proposals in 2001 will yield more accurate prices and still allow adequate time to secure replacement capacity.

# VII. Nuclear Waste Management Report Accepted

The dry cask storage certificate of need requires NSP to file an annual nuclear waste management report, including the following information:

- a. Current pool inventory at both the Monticello and Prairie Island plants, including full core off-load capability;
- b. Current cask inventory and projected date for reaching 17 casks;
- c. Any technical difficulties encountered in the construction or operation of the dry cask storage facility;
- d. All Company contacts with the Nuclear Regulatory Commission in regard to the dry cask storage facility;
- e. The results of the Company's radiation monitoring program, which shall be sent to the Indian Community;
- f. The status of the Company's low level waste storage program;
- g. Projected dates of any future filings requesting additional nuclear waste storage capacity;
- h. Description of any present or future Company initiatives to expedite Department of Energy compliance with its responsibilities to remove and dispose of spent nuclear fuel.

#### ORDER GRANTING LIMITED CERTIFICATE OF NEED at 33-34.

The North American Water Office challenged the adequacy of NSP's most recent annual report, chiefly because it failed to mention a rulemaking proceeding before the Nuclear Regulatory Commission on dry cask operations.

The Company stated it had not mentioned the rulemaking because it was industry-wide, not NSP-specific, but that it would mention rulemakings and other industry-wide proceedings in the future if the Commission wished. The Department stated it believed the Company's report complied with the provisions of the Order, but that notice of proceedings such as the rulemaking would be helpful.

The Commission will accept this report but will direct the Company to include in future reports information on *all* Nuclear Regulatory Commission proceedings which could affect its nuclear waste management program.

#### VIII. Filing Requirements On Nuclear Issues in Next Resource Plan

C.U.R.E. and the Department noted that, as the 2007 deadline approaches, nuclear decommissioning, off-site storage, and potential relicensing issues become more pressing. They recommended that the Company's next resource plan include the following information:

- (a) an update on Company efforts to find off-site storage, the need for a contingent decommissioning plan, and the estimated time frame for preparing a contingent decommissioning plan;
- (b) a report on Company discussions, studies, and plans regarding the relicensing of the Prairie Island reactors;
- (c) a study of the cost of decommissioning the Prairie Island plant and maintaining spent fuel storage over the planning horizon;
- (d) an evaluation of non-nuclear resource options, using the analytical framework in the ORDER GRANTING LIMITED CERTIFICATE OF NEED;
- (e) an update on all nuclear topics treated in the current resource plan.

The Commission agrees that this information would be helpful and will require it.

# IX. Demand Side Management Goals

#### A. The Issue

In NSP's last resource plan (in 1995) the Company proposed demand side management goals that were lower than those approved in its previous two resource plans.<sup>5</sup> The Commission declined to approve or reject these 1995 goals, agreeing with the parties that the issue deserved comprehensive reexamination during the next planning cycle.<sup>6</sup> The Company met with the stakeholders before filing the present plan, which does propose energy efficiency goals 20% higher than those proposed in the 1995 plan. The demand goals proposed in the plan not only did not rise from 1995 levels, however, but are 15% below those levels.

The Company attributed this mainly to having moved beyond the initial stages of demand side management, when projects with obvious and rapid pay-backs were plentiful. Now, the

<sup>&</sup>lt;sup>5</sup> Demand side management is a catch-all term for all methods of reducing resource needs through managing or reducing demand — conservation, energy efficiency, load management.

<sup>&</sup>lt;sup>6</sup> In the Matter of a Request by Northern States Power Company for Approval of its 1995 Resource Plan, Docket No. E-002/RP-95-589, ORDER APPROVING NSP'S 1995 RESOURCE PLAN AS MODIFIED, REQUIRING CONSULTATION WITH INTERESTED PARTIES AND COMPLIANCE FILING, AND SETTING REQUIREMENTS FOR NEXT RESOURCE PLAN FILING (April 29, 1997).

company said, pay-back periods were longer and less attractive to consumers.

Stricter energy efficiency standards for consumer products, together with past rebate programs and natural replacement schedules, left fewer inefficient appliances to be replaced. Numerous insulation programs, together with stricter building codes, left fewer drafty houses to be insulated. Advances in commercial and industrial lighting, together with past programs targeting commercial and industrial customers, left fewer commercial and industrial sites to be retrofitted.

In short, the Company claimed that most clearly cost-effective projects had been done. Remaining projects had higher cost/benefit ratios and less appeal to consumers. To continue posting gains at past levels would require higher levels of ratepayer funding.

The Department agreed in large part with the Company, but remained committed to working with the Company to identify new strategies for achieving cost-effective demand side management.

The Izaak Walton League, joined by the Prairie Island Coalition and Minnesotans for an Energy-Efficient Economy, claimed that NSP's demand side management models were fundamentally flawed in at least three ways: (1) they were mired in business-as-usual assumptions, failing to credit the potential of program improvements; (2) they focused on specific technologies, missing niche and system efficiency opportunities; and (3) they failed to adequately reflect the effects of non-utility energy efficiency initiatives.

The Prairie Island Coalition proposed requiring the next resource plan to analyze the costs, benefits, and logistics of direct installation programs, specifically targeting refrigeration for the residential sector, efficient heating/lighting/ventilation/air conditioning for the commercial sector, and more efficient motors and motor controls for the industrial sector.

# **B.** Commission Action

The Izaak Walton League, the Prairie Island Coalition, and Minnesotans for an Energy-Efficient Economy make intriguing arguments for overhauling the Company's demand side management goals. The Department, too, although recommending acceptance of this plan's goals, seems primed to reexamine NSP's approach to demand side management in the near term. This is clearly a promising time for the Company to rethink its approach to demand side management.

The Commission will accept the Company's demand side management goals, as they were revised after consultation with the parties, but will require the Company to strive to exceed them by at least 20% to 30% above the minimum in relation to the economic potential level, while continuing to meet the cost-effectiveness tests developed in the Conservation Improvement Program. Increasing reliance on conservation is a dominant theme of the resource planning statute, and the fact that easy opportunities may already have been exploited does not change that fact. As the Izaak Walton League noted, international experience suggests that further efficiency gains are not just possible, but achievable.

The Commission will also require the Company to meet with the stakeholders who commented on this issue to refine its demand side management modeling and analysis for its next resource plan. The Company is no doubt correct that the landscape has changed since it first began its

work in demand side management. This is all the more reason to seek the help of informed and engaged stakeholders in responding to new realities.

# X. Factoring Environmental Costs into Resource Selection

#### A. The Issue

The resource planning statute required the Commission to establish a range of monetary values for the environmental costs of all forms of generation and to use these values in any proceeding which involved evaluating or selecting resources. Minn. Stat. § 216B.2422, subd. 3. The Commission established interim values on March 4, 1994 and permanent values on January 3, 1997 and July 2, 1997. Since that time environmental costs have been factored into all resource selection decisions in one way or another.

The environmental cost values established in the Commission's Orders set a range of monetary values for each ton of six common and measurable emissions from power plants: sulfur dioxide, nitrogen oxides, carbon monoxide, particulate matter, lead, and carbon dioxide.<sup>8</sup> There are separate cost ranges for plants in urban, metropolitan fringe, and rural areas.

In this resource plan NSP considered environmental costs by calculating for all resources under consideration their direct costs, their costs including low-range environmental costs, and their costs including high-range environmental costs. This was consistent with the requirements of the last resource plan Order, and no one challenged the treatment of environmental costs in this resource plan.

The Company and the Department did disagree, however, on how environmental costs should be treated in upcoming competitive bidding for new resources and in its next resource plan.

<sup>&</sup>lt;sup>7</sup> In the Matter of the Quantification of Environmental Costs Pursuant to Laws of Minnesota 1993, Chapter 356, Section 3, Docket No. E-999/CI-93-583, ORDER ESTABLISHING ENVIRONMENTAL COST VALUES (January 3, 1997), and ORDER AFFIRMING IN PART AND MODIFYING IN PART ORDER ESTABLISHING ENVIRONMENTAL COST VALUES (July 2, 1997).

<sup>&</sup>lt;sup>8</sup> Although the Orders acknowledged the potential hazards of mercury emissions, they did not set monetary values for mercury, because reliable data was lacking. Instead, the Commission required utilities to report on mercury emissions and control efforts and left open the possibility of setting cost values for mercury at a later date.

#### **B.** Positions of the Parties

# 1. The Department

The Department recommended that the Company apply the following procedure in evaluating the environmental costs of bids for new supply:

NSP will evaluate the costs of all alternative resource options under three scenarios: direct costs only, direct costs plus low end of the range of the Commission's approved environmental cost values, and direct costs plus the high end of the range of the Commission's approved environmental cost values. NSP will then consider any other factors (other than environmental costs and direct costs) and base its recommendations on the considerations of all social cost factors, with the presumption that some positive level of the Commission approved environmental costs will be used in the resource selection. In cases in which a bidder has an unidentified resource, the bid shall be evaluated using the low and high environmental cost values of the competing bid imposing the highest environmental costs. A bid with an unidentified resource shall be evaluated using no environmental costs if the bidder guarantees in its bid and in the final written contract that it will not use a resource located within 200 miles of the Minnesota border.

# 2. The Company

NSP opposed the procedure advocated by the Department. First, the Company argued against a presumption that some level of environmental costs should be assigned for all resources, saying all factors in each case should be considered before reaching that conclusion.

The Company agreed that bidders should not be allowed to withhold location or emissions data if known, and it promised to police the bidding process to prevent such game playing. At the same time, the Company opposed assigning any environmental costs to new capacity provided from existing facilities. The Company argued that any existing facility economical enough to prevail in the NSP bidding process would operate whether or not NSP bought its power; NSP's purchase, then, would have no effect on the environment and should not be assigned any environmental costs

#### C. Commission Action

The Commission finds that the procedure proposed by the Department reflects the values and policies underlying the environmental cost statute and should be adopted.

#### 1. The Presumption that Environmental Costs Will Be Assigned

The presumption that all resource options carry some level of environmental costs is the presumption that underlies the statute. The statute required that the Commission "to the extent practicable, quantify and establish a range of environmental costs associated with *each* method of electricity generation." Minn. Stat. § 216B.2422, subd. 3, emphasis added. It did not exempt some methods of generation as being cost-free.

At the same time it did recognize that there are practical limits to quantifying and assigning environmental costs ("*To the extent practicable* . . . ). From this the Commission concludes that the presumption that environmental costs should be assigned is rebuttable, as the Department's formulation provides.

The Commission concludes that the presumption in favor of assigning environmental costs is simply a restatement of existing public policy and does no more than place the burden of proof where it belongs, on the party claiming that a resource carries or should be assigned no environmental costs.

# 2. Assigning Environmental Costs to Existing Facilities

The Commission agrees with the Department that it would violate the intent of the environmental cost statute to assign no environmental costs to existing facilities submitting competitive bids or vendors submitting competitive bids who are not certain which plant will provide the capacity. While the Company argues that existing facilities will operate whether or not NSP buys their output, making NSP's decision environmentally irrelevant, that may not be the case.

First, as the Department points out, using existing resources creates a need for new generation somewhere on the grid, and that new generation will carry environmental costs. Assigning no costs to the decision requiring that new generation is an exercise in denial, exactly the mind-set the environmental cost statute was trying to avoid.

Second, it is possible that factoring in environmental costs and choosing a different resource based on high environmental costs *could* result in the closure of extremely polluting plants, depending upon their location, transmission costs, and regulatory standards in their likely markets. As the Company points out, choosing resources and assigning environmental costs are intensely fact-driven tasks, and generalizing about them has limited value.

Finally, even if it is true that an existing facility will continue to operate regardless of relatively high environmental costs, and even if this should justify *selecting* the resource, there is value in complying with the statute and recognizing the environmental costs the facility, as opposed to the selection of the facility, imposes. It is only when evaluating environmental costs becomes as integral a part of resource selection as evaluating tax consequences and reliability that the goals of the statute will have been achieved.

For all these reasons, the Commission will require the Company to use the environmental cost procedure recommended by the Department in future competitive bidding and in its next resource plan.

# **XI.** Other Socioeconomic and Environmental Issues

# A. Manitoba Hydro

#### 1. The Issue

NSP buys a significant portion of its energy from the Manitoba Hydro Electric Board (Manitoba Hydro), a Canadian utility which generates most of its electricity at large dams on the Nelson River some 500 miles north of Winnipeg.

The Residential Utilities Division of the Office of the Attorney General (RUD-OAG), joined by C.U.R.E., urged the Commission to require supplementary filings by the Company addressing allegations of significant (and costly) greenhouse gas emissions from reservoirs used by Manitoba Hydro and of environmental and cultural depredations to the Cross Lake Band of Cree, in whose lands the dams are located.

The Department suggested focusing discussion on future purchases from Manitoba Hydro and requiring a report on the allegations with the next resource plan filing.

The Prairie Island Coalition urged the Commission to order NSP to fund the preparation of an annual report on the situation by the Cross Lake Community itself. Minnesotans for an Energy-Efficient Economy and the Crazy Horse Defense Project urged careful consideration of the environmental and socioeconomic impact of all NSP resources, especially its purchases from Manitoba Hydro.

The Company stated that it had met with representatives of the Cross Lake Cree and was monitoring the situation. The Company stated that compensation issues surrounding the flooding of Cree lands had been in various stages of negotiation and litigation for some 20 years and was more properly a concern of the Canadian and Manitoba governments than this Commission.

#### 2. Commission Action

The Commission understands that it has a statutory obligation to require the consideration of environmental and socioeconomic costs in the selection of resources, but it is not convinced that that obligation extends at present to the conflict between the Cree and Manitoba Hydro.

The Canadian and Manitoba governments are addressing the issue, and the facts are much more readily available to them than to this Commission. There is no purchase from Manitoba Hydro before the Commission raising these issues. For that matter, the issue would not normally come before the Commission, since, in its Order setting environmental cost values, the Commission, for practical reasons, limited their application to facilities within 200 miles of the Minnesota border.<sup>9</sup>

For all these reasons, the Commission will not require further factual development of these issues at present. It will, however, direct the Company to continue monitoring the issue as part of its ongoing review of resources.

<sup>&</sup>lt;sup>9</sup> In the Matter of the Quantification of Environmental Costs Pursuant to Laws of Minnesota 1993, Chapter 356, Section 3, Docket No. E-999/CI-93-583, ORDER ESTABLISHING ENVIRONMENTAL COST VALUES (January 3, 1997), and ORDER AFFIRMING IN PART AND MODIFYING IN PART ORDER ESTABLISHING ENVIRONMENTAL COST VALUES (July 2, 1997).

#### **B.** Metro-Area Coal-Fired Plants

The Izaak Walton League, joined by Minnesotans for an Energy-Efficient Economy, urged the Commission to require the Company to conduct a study of the costs and feasibility of converting the four remaining coal-fired plants in the metropolitan area to natural gas-fired plants. The goal was to reduce emissions in an area that is heavily populated and rife with other sources of pollution.

The Department supported a study, but cautioned that cost-effectiveness was unlikely because the plants were nearly fully depreciated. NSP emphasized that all four plants were in full compliance with environmental standards and suggested limiting the study to the two units most likely to qualify for conversion on cost-effectiveness grounds: Black Dog 1 and Black Dog 2.

The Commission agrees that it makes sense to begin any study with these two units and will so order. The study can be expanded if preliminary results or intervening events so indicate.

# C. Mercury Emissions

Minnesotans for an Energy-Efficient Economy urged the Commission to order the Company to plan for compliance with the recommendations of the Minnesota Pollution Control Agency's Mercury Reduction Initiative. The Company stated that it was an active participant in the Initiative, but that the Initiative was still in the discussion phase. There were as yet no binding recommendations to implement.

When it set environmental cost values the Commission was unable to set a value for mercury due to a lack of data. Instead, the Commission required utilities to report on mercury emissions and control efforts and left open the possibility of setting cost values for mercury at a later date. The Pollution Control Agency's Mercury Reduction Initiative is a heartening development.

It does appear, however, that that Initiative has not yet reached the point of producing binding, or even clearly endorsed, recommendations. The Commission concludes, with the Company, that planning to implement those recommendations can best be done when the recommendations themselves are clear. In the mean time, the Company will be directed to monitor closely the Initiative's progress in reducing mercury emissions.

<sup>&</sup>lt;sup>10</sup> In the Matter of the Quantification of Environmental Costs Pursuant to Laws of Minnesota 1993, Chapter 356, Section 3, Docket No. E-999/CI-93-583, ORDER ESTABLISHING ENVIRONMENTAL COST VALUES (January 3, 1997), and ORDER AFFIRMING IN PART AND MODIFYING IN PART ORDER ESTABLISHING ENVIRONMENTAL COST VALUES (July 2, 1997).

# D. Nitrogen Oxides and Carbon Dioxide

The Department recommended that the Company include in its next resource plan a detailed explanation of how it intended to meet the nitrogen oxide reduction requirements of the federal Clean Air Act Amendments and how it would deal with potentially stringent new carbon dioxide regulations. The Company agreed to report on nitrogen oxides but recommended postponing detailed filings on complying with new carbon regulations until such regulations were in place.

The Commission agrees with the Department that far-reaching new carbon regulations are sufficiently likely to justify preliminary analysis now. The Commission will require both filings recommended by the Department.

# XII. The Company's Next Resource Plan

#### B. Its Content

The Department made detailed recommendations on the informational content of the Company's next resource plan, chiefly in the areas of forecasting and transmission. The Company did not object to any of the Department's content recommendations, and the Commission will adopt them.

The Department also made detailed recommendations for change in the Company's planning approach during the next planning period. These recommendations ranged from providing more detailed documentation of the factual basis for its demand forecasts to making substantive changes in the models used to reach those forecasts.

By the date of the hearing the Company and the Department had reached agreement on many of these recommendations. Discussions were continuing and were productive. Both parties stated they intended to continue meeting in a mutual effort to refine the Company's planning processes. This is an encouraging development and the Commission applauds it.

The Commission finds that the Department's recommendations on the whole are sound and will improve the Company's planning process. The Commission will adopt them, subject to modification by agreement of the parties.

# **B.** Filing Date

The statute does not specify how frequently resource plans should be filed, leaving that to Commission discretion. The Commission's rules specify biennial filings, but as resource issues have become more complex and planning horizons longer, this and other companies have been granted variances from rigid two-year filing schedules.

The Company filed this resource plan on January 5, 1998. The Commission will require its next resource plan filing on July 1, 2000, by which time the nuclear, renewable energy, and demand side management issues which dominated this plan should be clearer.

#### **ORDER**

- 1. Northern States Power Company's 1998 resource plan is hereby approved as modified herein.
- 2. In its next resource plan Northern States Power Company (NSP or the Company) shall include all information on transmission and forecast issues recommended by the Department of Public Service.
- 3. Subject to modification in discussions with the Department of Public Service, the Company shall revise its planning approach in the following areas, as recommended by the Department:
  - (a) its documentation of forecasts and peak demand during the coming planning period;
  - (b) its forecasting of energy requirements during the coming planning period;
  - (c) its forecasting of peak demand during the coming planning period.
- 4. In its next resource plan and in its competitive bidding process the Company shall apply the procedure recommended the Department of Public Service in evaluating environmental costs.
- 5. NSP shall file an updated competitive bidding schedule at a later date to be determined through negotiation with interested parties.
- 6. NSP shall treat its proposed achievable demand side management goals as the minimum it is expected to achieve and shall strive to raise its achievable goals by at least 20-30% above the minimum in relation to the economic potential level, while still meeting the cost effectiveness tests developed in the Conservation Improvement Program.
- 7. NSP shall meet with the Department of Public Service, the Izaak Walton League, and other interested parties to discuss how to improve its analysis of its demand side management goals in its next resource plan.
- 8. NSP shall construct and operate, purchase, or contract to purchase an additional 400 megawatts of electric energy installed capacity generated by wind energy conversion within the time frame of this resource plan.
- 9. NSP shall work with interested parties to develop an all-source competitive bidding process that is unbiased in its treatment of renewable forms of energy generation and shall file a description of that process at least 90 days before filing any Request for Proposals for new generation. If an unbiased all-source competitive bidding process cannot be achieved, NSP shall file a letter so stating at least 90 days before filing any Request for Proposals for new generation.

- 10. The Company shall include in its next resource plan the following information relating to nuclear issues:
  - (a) an update on Company efforts to find off-site storage, the need for a contingent decommissioning plan, and the estimated time frame for preparing a contingent decommissioning plan;
  - (b) a report on Company discussions, studies, and plans regarding the relicensing of the Prairie Island reactors;
  - (c) a study of the cost of decommissioning the Prairie Island plant and maintaining spent fuel storage over the planning horizon;
  - (d) an evaluation of non-nuclear resource options, using the analytical framework in the ORDER GRANTING LIMITED CERTIFICATE OF NEED;
  - (e) an update on all nuclear topics treated in the current resource plan.
- 11. In all future nuclear waste management reports the Company shall include information on any Nuclear Regulatory Commission proceeding that could affect its nuclear waste management program, including industry-wide proceedings.
- 12. As soon as they become available, the Company shall file updated versions of its bulk power transmission planning reports and the Mid-Continent Area Power Pool's first 10-year Biennial Regional Transmission Plan.
- 13. In its next resource plan filing the Company shall include the transmission-related documents and information recommended for inclusion by the Department.
- 14. NSP shall conduct a study of the feasibility of converting its Black Dog Units 1 and 2 from coal-fired generation to natural gas and shall include that study in its next resource plan filing.
- 15. NSP shall continue monitoring issues surrounding the environmental effects of the dams supplying power to the Manitoba Hydro Electric Board and the effects of the dams on the Cross Lake Band of Cree.
- 16. NSP shall continue to monitor closely the development of mercury emission reduction standards by the Minnesota Pollution Control Agency.
- 17. In its next resource plan NSP shall include a more detailed presentation on how it intends to meet nitrogen oxide emission reductions required under the federal Clean Air Act Amendments.
- 18. In its next resource plan NSP shall include an updated analysis of the impact of potential carbon dioxide regulations on the Company's system, taking into account the potential costs of regulation.
- 19. NSP shall file its next resource plan by July 1, 2000.

20.	This Order shall become effective immediately.	
		BY ORDER OF THE COMMISSION
		Burl W. Haar Executive Secretary
(S.E.	A I )	
(SEA	AL)	
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